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Selective rather than routine approach to endosopic retrograde cholangio-pancreatography in diagnosis of biliary atresia

To the Editor:

Petersen and colleagues describe their experience in the "routine" use of endoscopic retrograde cholangio-pancreatography (ERCP) in children awaiting explorative laparotomy (EL) for suspected biliary atresia (BA) [1]. They report that almost 25% of the infants have avoided surgery after documenting a patent biliary tree. The quoted specificity of ERCP in diagnosing BA was 73% [1].

The aim of avoiding unnecessary surgery is valiant and undoubted, but we feel that a non-selective approach to a relatively invasive procedure in jaundiced infants, who may be recovering from the potentially recoverable liver injury, such as the one secondary to prematurity, total parenteral nutrition, severe haemolysis and/or infection, may not be justified. Repeated general anaesthetic, required by combined ERCP/EL, in a jaundiced child carries additional risks outside the usual economic arguments. Sixty (43%) infants referred to Petersen et al. who underwent ERCP actually did not have BA. Suspected BA may mean different things for different centres and submitting all referred children to ERCP may not be indicated, despite the technical excellence.

In this study the "pre-selection" information, including ultrasound findings or liver histology, was unfortunately not presented, although the authors have quoted experiences where specificity for percutaneous liver biopsy was 96% [2] and 89% [3], respectively. An early study from our centre found the liver histology as sufficient for diagnosis of BA in 86% infants with neonatal cholestasis [4]. Finally, in the study by Petersen et al. the children undergoing ERCP/EL combination were up to 174 days old, an age where benefits of corrective surgery are somewhat dubious.

We have recently reported our own tertiary centre experience on use of ERCP in 48 cholestatic infants younger than 100 days, representing only around 4% of infants with neonatal cholestasis, where diagnosis after comprehensive hepatological work-up remained unclear [5]. EL was avoided in 42% of children, while selective ERCP had a specificity of 87% for diagnosis of BA [5].

Protocols for investigating infants with prolonged neonatal cholestasis will continue to differ from centre to centre, but there is no substitute for evaluation of all the available clinical information, including monitoring stool colour and its change on choleretics [6]. ERCP is a very welcome addition to the diagnostic algorithm for the diagnosis of BA, but in our view should be used selectively once other, less invasive, tests have proven inconclusive.

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